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TRACO POWER

AC/DC Power Supply

TXLN 320 Series, 320 Watt

- **Compact metal case with screw terminal block**
- **Universal input 85-264 VAC**
- **High efficiency up to 89%**
- **Active PFC >0.95**
- **Compliance to EN 61000-3-2**
- **Short circuit, overvoltage and overload protection**
- **IEC/EN/UL 62368-1 safety approvals**
- **3 year product warranty**



UL 62368-1 IEC 62368-1

The TXLN series is a family of encased power supplies designed for a wide range of cost critical applications. With a low profile metal case and screw terminal block connection, they are easy to install in any equipment. These power supplies have universal input and comply with European EMC standards and the Low Voltage Directive (LVD).

Models

Order Code	Output Power max.	Output Voltage nom. (adjustable)	Output Current max.	Efficiency typ.
TXLN 320-112	320 W	12 VDC (10.8 - 13.2 VDC)	26'700 mA	86 %
TXLN 320-124		24 VDC (21.6 - 26.4 VDC)	13'400 mA	88 %
TXLN 320-148		48 VDC (43.2 - 52.8 VDC)	6'700 mA	89 %

Options

on demand (backorder with MOQ non stocking item)	- Optional model with 5 VDC / 60'000 mA - Optional model with 36 VDC / 8'900 mA

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Input Specifications

Input Voltage	- AC Range	Operational Range:	85 - 264 VAC (Full Range)
		Rated Range:	100 - 240 VAC (Full Range)
	- DC Range	Operational Range:	120 - 375 VDC (Designed for, no certification)
		Polarity:	irrelevant
Input Frequency		Operational Range:	47 - 63 Hz
		Certified:	50/60 Hz
Input Current	- Full Load & Vin = 115 VAC		4'300 mA max.
Input Inrush Current	- At 230 VAC		50 A max.
	- At 115 VAC		25 A max.
Power Factor	- At 230 VAC		0.95 min. (Active Power Factor Correction)
	- At 115 VAC		0.95 min. (Active Power Factor Correction)
Input Protection			T 6.3 A / 250 VAC (Internal Fuse)
Recommended Input Fuse			6'300 mA (slow blow) (The need of an external fuse has to be assessed in the final application.)

Output Specifications

Output Voltage Adjustment			±10% (By trim potentiometer) Output power must not exceed rated power!
Voltage Set Accuracy			±2% max. (5 Vout model) ±1% max. (other models)
Regulation	- Input Variation (Vmin - Vmax)		1% max. (5 Vout model) 0.5% max. (other models)
	- Load Variation (0 - 100%)		2% max. (5 Vout model) 1% max. (other models)
Ripple and Noise (20 MHz Bandwidth)		5 VDC model:	150 mVp-p max. (w/ 0.1 µF || 47 µF)
		12 VDC model:	150 mVp-p max. (w/ 0.1 µF || 47 µF)
		24 VDC model:	150 mVp-p max. (w/ 0.1 µF || 47 µF)
		36 VDC model:	220 mVp-p max. (w/ 0.1 µF || 47 µF)
		48 VDC model:	240 mVp-p max. (w/ 0.1 µF || 47 µF)
Minimum Load			Not required
Temperature Coefficient			±0.03 %/K max.
Hold-up Time	- At 230 VAC		8 ms min.
Start-up Time	- At 230 VAC		1'500 ms max.
	- At 115 VAC		3'000 ms max.
Short Circuit Protection			Continuous, Automatic recovery
Output Current Limitation			105 - 135% of Iout max.
Overvoltage Protection			115 - 140% of Vout nom.

Safety Specifications

Safety Standards	- IT / Multimedia Equipment	EN 62368-1 IEC 62368-1 UL 62368-1
	- Certification Documents	www.tracopower.com/overview/txln320
Protection Class		Class I (Prepared): Connection to PE
Pollution Degree		PD 2
Over Voltage Category		OVC II

EMC Specifications

EMI Emissions	- Conducted Emissions	EN 55032 class B (internal filter)
	- Radiated Emissions	EN 55032 class B (internal filter)
	- Harmonic Current Emissions	EN 61000-3-2, class D
	- Voltage Fluctuations & Flicker	EN 61000-3-3

All specifications valid at nominal voltage, resistive full load and +25°C after warm-up time, unless otherwise stated.

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EMS Immunity			EN 55024 (IT Equipment) EN 55035 (Multimedia)
	- Electrostatic Discharge	Air:	EN 61000-4-2, ±8 kV, perf. criteria A
		Contact:	EN 61000-4-2, ±4 kV, perf. criteria A
	- RF Electromagnetic Field		EN 61000-4-3, 3 V/m, perf. criteria A
	- EFT (Burst) / Surge		EN 61000-4-4, ±1 kV, perf. criteria A
		L to L:	EN 61000-4-5, ±1 kV, perf. criteria B
		L to PE:	EN 61000-4-5, ±2 kV, perf. criteria B
	- Conducted RF Disturbances		EN 61000-4-6, 3 Vrms, perf. criteria A
	- PF Magnetic Field	Continuous:	EN 61000-4-8, 3 A/m, perf. criteria A
	- Voltage Dips & Interruptions	230 VAC / 50 Hz:	EN 61000-4-11 30%, 25 periods, perf. criteria A >95%, 0.5 periods, perf. criteria A >95%, 250 periods, perf. criteria B

General Specifications

Relative Humidity			90% max. (non condensing)
Temperature Ranges	- Operating Temperature		–30°C to +70°C
	- Storage Temperature		–40°C to +85°C
Power Derating	- High Temperature		2.5 %/K above 50°C
	- Low Input Voltage		0.66 %/V below 100 VAC
		See application note:	www.tracopower.com/overview/txln320
Over Temperature Protection Switch Off	- Protection Mode		Latch off
Cooling System			Forced air cooling (with internal fan)
Fan Power Source	- Characteristic		Variable fan speed (temperature regulated)
	- Output Voltage		12 VDC
	- Output Current		125 mA max.
Altitude During Operation			5'000 m max. (The max. ambient temperature decreases by 5 K / 1000 m when operated above 2000 m)
Switching Frequency			90 - 110 kHz (PWM)
Insulation System			Reinforced Insulation
Isolation Test Voltage	- Input to Output, 60 s		3'000 VAC
	- Input to Case or PE, 60 s		1'800 VAC
	- Output to Case or PE, 60 s		500 VAC
Isolation Resistance	- Input to Output, 500 VDC		100 MΩ min.
Isolation Capacitance	- Input to Output, 100 kHz, 1 V		20'000 pF max.
Leakage Current (at 264 VAC / 60Hz)	- Earth Leakage Current		1500 µA max.
Distance Through Isolation			6 mm
Reliability	- Calculated MTBF		175'900 h (MIL-HDBK-217F, ground benign)
Housing Material			Aluminum
Housing Type			Metal Case
Mounting Type			Chassis Mount
Connection Type			Screw Terminal
Weight			850 g
Status Indicator			Indicated by green LED

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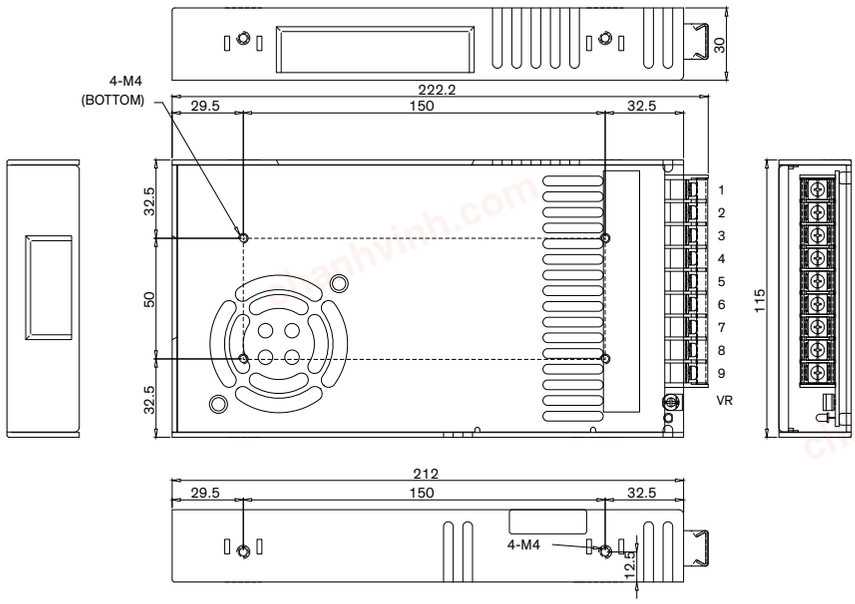
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Environmental Compliance	- REACH Declaration	www.tracopower.com/info/reach-declaration.pdf REACH SVHC list compliant REACH Annex XVII compliant
	- RoHS Declaration	www.tracopower.com/info/rohs-declaration.pdf Exemptions: 7a, 7c-I (RoHS exemptions refer to the component concentration only, not to the overall concentration in the product (O5A rule). The SCIP number is provided on request.)

Supporting Documents

Overview Link (for additional Documents)	www.tracopower.com/overview/txln320

Outline Dimensions



Screw Terminal	
Pin	**Function**
1	AC (L)
2	AC (N)
3	PE
4-6	–Vout
7-9	+Vout

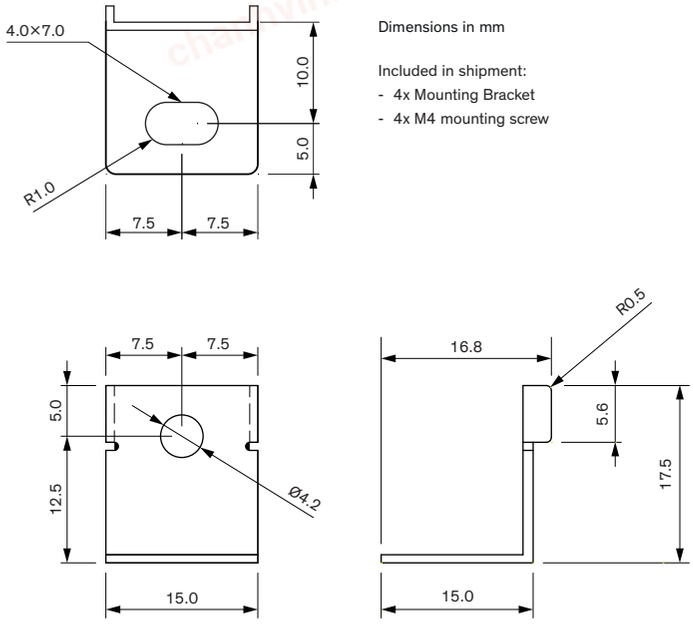
Dimensions in mm
Tolerances:
0-8: ±0.2
8-25: ±0.3
25-80: ±0.5
80-250: ±0.8

Mounting screws
Max. screw penetration depth: 4.0
Max. screw locked torque: 0.8 Nm

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Mounting Bracket (included)



Dimensions in mm

Included in shipment:
- 4x Mounting Bracket
- 4x M4 mounting screw

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